

## INTERNATIONAL SEARCH REPORT

 International Application No  
 PCT/US2004/020026

 A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 A61K39/385

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

No.	No.
<p>P, X DATABASE BIOSIS 'Online!          INFORMATION SERVICE,          PHILADELPHIA, PA, US;          14 October 2003 (2003-10-14),          KIM J ET AL: "Tetanus toxin C-fragment as          a universal carrier protein for conjugate          vaccines."          XP002302424          Database accession no. PREV200400041633          abstract          &amp; ABSTRACTS OF THE INTERSCIENCE          CONFERENCE ON ANTIMICROBIAL AGENTS AND          CHEMOTHERAPY,          vol. 43, 2003, page 294,          43RD ANNUAL INTERSCIENCE CONFERENCE ON          ANTIMICROBIAL AGENTS AND CHEMOTHERAPY;          CHICAGO, IL, USA; SEPTEMBER 14-17, 2003          -----          -/--</p>	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## ° Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- \*&\* document member of the same patent family

Date of the actual completion of the international search

26 October 2004

Date of mailing of the international search report

15/11/2004

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 443 966 A (MAKOFF ANDREW J ET AL) 22 August 1995 (1995-08-22) Column 3, lines 20-24 -----	1-15
Y	WO 99/15671 A (CHATFIELD STEVEN NEVILLE ; MEDEVA EUROP LTD (GB)) 1 April 1999 (1999-04-01) Claims 1 and 7 -----	1-15
Y	EP 0 427 347 A (ENIRICERCH SPA) 15 May 1991 (1991-05-15) page 6, lines 19-26; page 3, lines 6-14. -----	1-15
X	US 5 785 973 A (PILLAI SUBRAMONIA ET AL) 28 July 1998 (1998-07-28) Column 5-8, point 6.2, claims 1,7-8, 11. -----	1-15
A	WO 95/04151 A (KHAN MOHAMMED ANJAM ; DOUGAN GORDON (GB); CHATFIELD STEVEN NEVILLE (GB) 9 February 1995 (1995-02-09) the whole document -----	1-15

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## INTERNATIONAL SEARCH REPORT

International application No.  
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### Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 1-10 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

#### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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## INTERNATIONAL SEARCH REPORT

International Application No  
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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5443966	A	22-08-1995	AT 132532 T	15-01-1996
			DE 69024652 D1	15-02-1996
			DE 69024652 T2	15-05-1996
			DK 478602 T3	05-02-1996
			EP 0478602 A1	08-04-1992
			ES 2084030 T3	01-05-1996
			WO 9015871 A1	27-12-1990
			JP 2981286 B2	22-11-1999
			JP 4506005 T	22-10-1992
WO 9915671	A	01-04-1999	AT 241013 T	15-06-2003
			AU 751646 B2	22-08-2002
			AU 9174498 A	12-04-1999
			CA 2304255 A1	01-04-1999
			DE 69814884 D1	26-06-2003
			DE 69814884 T2	11-03-2004
			EP 1015593 A1	05-07-2000
			ES 2199460 T3	16-02-2004
			WO 9915671 A1	01-04-1999
			HU 0003511 A2	28-02-2001
			JP 2001517447 T	09-10-2001
			NO 20001397 A	05-05-2000
			PL 339366 A1	18-12-2000
EP 0427347	A	15-05-1991	IT 1237764 B	17-06-1993
			AT 118787 T	15-03-1995
			DE 69017149 D1	30-03-1995
			DE 69017149 T2	03-08-1995
			DK 427347 T3	06-06-1995
			EP 0427347 A1	15-05-1991
			ES 2070269 T3	01-06-1995
			GR 3015791 T3	31-07-1995
			US 5196512 A	23-03-1993
US 5785973	A	28-07-1998	AT 109008 T	15-08-1994
			AU 634153 B2	18-02-1993
			AU 3065489 A	25-08-1989
			DE 68917126 D1	01-09-1994
			DE 68917126 T2	02-02-1995
			DK 182990 A	31-07-1990
			EP 0399001 A1	28-11-1990
			FI 104374 B1	14-01-2000
			JP 2921574 B2	19-07-1999
			JP 3502691 T	20-06-1991
			NO 902909 A ,B,	27-08-1990
			WO 8906974 A2	10-08-1989
WO 9504151	A	09-02-1995	AT 215124 T	15-04-2002
			AU 4719393 A	03-03-1994
			AU 7235794 A	28-02-1995
			CA 2168459 A1	09-02-1995
			CZ 9600241 A3	12-06-1996
			DE 69322645 D1	28-01-1999
			DE 69322645 T2	20-05-1999
			DE 69430246 D1	02-05-2002
			DE 69430246 T2	12-12-2002
			DK 652962 T3	23-08-1999
			EP 0652962 A1	17-05-1995

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9504151	A	EP 0712442 A1	22-05-1996
		FI 950396 A	30-01-1995
		WO 9504151 A2	09-02-1995
		GR 3029498 T3	28-05-1999
		JP 8503602 T	23-04-1996
		JP 9500540 T	21-01-1997
		NO 950348 A	28-03-1995
		PL 313979 A1	05-08-1996
		US 6680182 B1	20-01-2004
		US 6488926 B1	03-12-2002
		GB 2295394 A , B	29-05-1996
		HU 74495 A2	28-01-1997
		SK 9996 A3	04-09-1996

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